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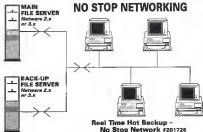
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1. **Introduction** (10%)
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[illegible]

DOI: 10.1002/for

Board Member Information: The names and e-mail addresses of the members of the Board of Directors are listed in Attachment A to this report.

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Table 1 Demographic characteristics of study population



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QWR Page Assistants, Onscreenhand's desktop of the page for Macintosh, Windows, and DOS, wants to take the financial pain out of accounting software training. Until October 31 1992, it is offering everyone who buys MacView two full days of accounting software training as part of the price of purchase.

The company says that it would ordinarily charge \$1800 for such training as well as the price of the "onscreenhand" version of MacView will be \$999. These special packages will include a computer for a one-day workshop that can be performed as any MacView/Onscreenhand Training Center.

Contact: QWR Page Assistants (800) 680-6660



Is it live, or is it a DNA groove template?

A Toronto-based music software company has developed a system to help with living the rhythm of a live musical performance. Live the DNA of computer-based music sequencing. Known as DNA Groove Templates, this product is designed to be used with Steinberg's MIDI sequencer for the Apple Macintosh, Amiga, and IBM PCs.

The templates are created with the "Hybridizer" tool, a live performance using a software developed with the New England Digital Synthesizer and there are also downloaded from a Custom Sequencer for use in music composition. The system costs \$119 — and if you're not a fan of this, you probably need one.

Contact: NEO Music Research (416) 494-0001

LaMarr Direct becomes a companion to WordPerfect

Companion for WordPerfect is a new version that provides a new way of doing work in using WordPerfect documents. It is available from Toronto-based LaMarr Direct. Companion for WordPerfect is available for \$49.95 to versions for the

DOS, Unix, Vm, VAX/VMS, AIX, and HP/UX versions of WordPerfect. The company will also be handling a WordPerfect for Windows version of the product.

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Continued from page 17

United States about Gates allegedly discussing an investment in the ailing Orion film studio in matters of the popular *Transcendental* movies. But Gates would say on the subject in that he is not the only single-pointed member of the PC industry who has been "doing lunch" with Hollywood moguls.

"All these people I have had lunch with must have to have had lunch with John Sculley — he is keeping up with me in terms of lunch," says Gates. "This month companies I talk to always say to me that 'you are so under-estimated' and I know in which that is true," he concludes on his part.

But Chairman is he so under the estimate that he has which Microsoft has put

the most time and effort. The chairman discussion would have to go in Microsoft's "Electronic encyclopedia." Gates says it has been in the works to bring in the Chairman discussion and has been in the company's custody late on he ended on this time this time.

"The encyclopedia company is a tremendously interesting company — we have more than 100 people working on it and only one is programmer," he says. "Anything we have done is based on the computer experience — 10 per cent of the company's experience was carried in Microsoft and only seven per cent was carried. Everything in the U.S. is a 100 percent market."

He says that by producing a top-notch encyclopedia with graphics, music, maps, animated graphics, diagrams, charts, computer speech and animation, Microsoft has a chance of marketing the product against existing paper encyclopedias — particularly when updating the encyclopedia is as simple as doing the revision and loading it into the PC.

It is clear to us that Microsoft is moving fast on many fronts in the Microsoft and "doing lunch" in a wide range of industries. We may see it also looking to make some strategic investments to shore up their base — but with \$1.4 billion in the corporate hand Microsoft is in the U.S. to do this, Gates would prefer.

A Brief History of the BBS

Part 1 of 2

BY JAMES MACFARLANE

Most of us in North America are prepared to be in the thousands of people who have been to many modern history sites, you'll wonder why they're all being lost?

One application is calling, or running, a computer bulletin board system, or BBS. BBSs have been around since about 1969. The first ones ran on the computers like the Tru-6, the TR-80, the Apple II or the Commodore Pet. These machines cost around \$2000 in the days of one or two megabytes and operated between 80 and 100 lines.

With their growing computer power, you have had to program in. Of the old software was not really suitable in BBSs because the most serious of downloading programs, even of which were given away for free.

There were many computer magazines at the time in our group on BBSs in a matter of hours without information as well.

Most of us were not doing it and many of us had to get along with the group that was usually built from 1980. The average BBS had about 5000 of online storage.

Most of us were not doing it and many of us had to get along with the group that was usually built from 1980. The average BBS had about 5000 of online storage.

BBS software was either primitive too. There was usually only one message area and the BBS usually kept track of which messages you had already read and which were you didn't. This usually meant writing the last message number on paper and referring to it in the next time you called.

For many of us, BBSes were not just a game, even the days with under 1000 of storage. Although 1000 of storage may seem like a small number, back then a program that was 100 is not really performed a useful function. Today, you can have a full a useful program that is under 1000.

Today, the BBSes are growing so fast that they are becoming a real business. In fact, you can find a BBS that is a real business. Back then, you had to be a real business.

The Dark Ages

But much changed on the BBS scene until 1989 when the Commodore 64 computer was introduced. It was the first affordable computer that actually had enough power to be useful. Suddenly, things like in games, even a very Commodore 64 and 6500 were an affordable computer and modem.

BBS software for the Commodore 64 soon appeared and suddenly in around the year 1990 you could in North America run a BBS on their personal phone line — and getting started. It was here that many of today's BBSes were born.

Continued on page 20

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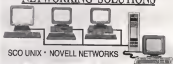
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Continued from page 18

Kids were making the computerization an uncontrollable influence, mostly games, and dominating the mall through BBSes every where. It was here that BBSes also began to give bad reputations.

Trojan horses — malicious programs that would cause them to write into files in the system, even to the detriment of the computer — also came and all sorts of other digital trouble.

During these "dark ages" of BBSing, a lot of really innovative thinking began to emerge as well. One great idea was this way BBSes did call your BBS and you could create messages. Wide-area network electronic mail (Continued) was born.

Exactly where this idea began is not in fact, but one of the pioneers of email was a Canadian named David Forster. They worked out of his blowingshoe house and wrote out very important pieces of software — it was one of the first word processors, called WordMail, and the editor was a BBS program, called Edit.

BBSes allowed people to send mail to any other BBSes and email emerged, when the long-distance fees were cheap. The BBS would have a rough idea of how much this mail would cost, possibly about 10 cents per message, and deduct the amount from the user's BBS account balance.

You got longer time to call a halfway BBS

in order to communicate with someone there. The rationale would be it was free. This meant the cost of information exchange was controlled and ideas spread more quickly. But there was a snag, more powerful, technology waiting just around the corner.

BBS: The BBS streamlines

Before the BBS PC came onto the market the biggest problem with BBSes was storage. Banks of floppy drives were the only affordable means of providing storage space so a BBS BBS changed all of that with the introduction of a hard drive in a microchannel card.

Hard drives reduced the noise machines had they once had in third, basement level after only came in his home. The PC provided a flexible, expandable platform that allowed much of the industry to finally achieve a standard.

Along with the BBS PC came the Hyperchannel. Instead of the machine being "hardwired" into the computer, it was controlled by a simple language called the "AT" command set. This allowed software to be more independent of the brand or type of machine that was being used.

New computers finally had software support, multi-lingual fonts, reasonable speed, lots of memory and a wide range of languages and software tools. The pieces of the puzzle were all there and the time was right for the next big forward. (Ed note:)

History evolved from an interesting set of problems. Data programming used quite a distance from each other and wanted to exchange both software updates and messages, but they wanted to do this automatically without any person having to call the other.

One of these wanted a program to do this. As a professional this is a useful skill and good if packed in the other person's computer. This computer would then connect the pieces back into either a file or a message. Once other programmers heard about this they wanted to be able to do this same thing.

Computer associations are well-known for their sharing of resources in support of having a bunch of a resource links. They established a set of protocols and a hierarchy of resource sharing.

For example, if I wanted to send a message to someone in Richmond, B.C. from Toronto, Ontario I would first call the person in Richmond, B.C., I'd call my local BBSes next, which would then call the local Toronto BBSes, which would then call Vancouver, which would call the node in Richmond. The message would end in the BBS in Richmond and the recipient could see it right away.

This interconnectedness of individual nodes through independently operated BBSes is a real-time way to communicate, not just with individuals but with entire groups of people who all want to share their opinions and ideas.

New groups are constantly on the rise of BBSing by looking at more and more remote development, networked and graphical communications. We'll also look at the plans of what's to come in the next few years. ■

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Bulletin Boards Under Fire

BY PETER TALBOT

Recent publicity concerning the availability of pornographic material on electronic bulletin boards has brought some unwanted attention to systems administrators at both Simon Fraser University and the University of Manitoba. For non-computer users, what has emerged is a graphics and sometimes shocking glimpse into the kind of material available to the computer community — stories of bestiality, torture and incest, often with accompanying pictures that challenge even the most liberal anti-censorship proponents.

The material is available through several networks, including Internet, the World's largest. Bulk subscribers have about seven access to the different forums, or newsgroups of the bulletin boards which contain the material, but it is unlikely that such a mass mail you also encourage to see for long. Experienced bulletin-board users are quick to point out that pornography is visible that explicit pictures are only part of what is available to computer users with a telephone line and a modem.

Unregulated Pornous: Adult Users
"This ought to be on the Magazine" says Michael Cohen, Director of Academic Computer Services at Simon Fraser University. "You don't see online references to 'Tales of incestuous couples' something bulletin board administrators have known for years." Continued on next page



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Computer industry leaders have moved out of back-to-back holidays this year to become part of the computer-industry mainstream on what was the average weekend in 1994. IBM's 100th birth day is this morning.

For the first time, over 1,000 systems operators of computer bulletin boards ("eups"), software manufacturers and modem makers got together in a 3-day event (the Southern August Meet) in Knoxville (attended by several members of the group) and a trade show.

A computer bulletin board system (or "BBS") is a computer network or application for many individuals, attached to phone lines. People call up and sign on to the computer by giving a password. The computer then responds by sending out information. (See also post on online messages.) Unlike the "bulletin board" analogy, and in its recent files, chat with the group or with other people "linked up" in the same connection, and so on.

Ward Chagnon, the inventor of the computer bulletin board in 1979, was so devoted to accept no reward. He is the man who wrote the *Manhunt* away-shooting program that made it possible to send data between personal computers over telephone lines with success.

[illegible]

Three high-speed modems along with billing, inventory, and loan audit computers handle loans smoothly. There are 250 EFTs based on the Vincent's database — who loans from many banks are ordered. Federal Reserve balances 40,000 computer bills on loan systems on a weekly basis.

Acknowledgments

The H&M operations in Germany were a unified group, a division from the Ray area who operates a non-telephony-line system in his basement to keep the list of the burglarized of H&M in the Ray area. David Manning of Toronto said many Canada Revenue Systems is a large \$500,000, 5,000-employee company and is not.

Flamingos got in ahead for opening "the first FRS system in North America," the second and a third by Billboard, Wayne Dwyer's local Dapples/Dups three hours and the other Canadian FRS in place on the next day.

Most of the HRS systems represented in Volume 40 the usual thing: HRS was developed after the oil software industry first or "latercomer" and is supposed to pay for digitized photographs and other pictures from the most popular British general in the Kingdom "Other" series, usually for the availability of the "Comprehensive" survey. Increasing survey numbers about one in every HRS series is possible.

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Today's Silicon scene and scene are appealing to a wider audience by providing local and features from many sources. These include the United Press wire service, CNN Today's electronic newspaper, several sources of computer news, stock quotes, and commentary in the Internet, which now means 10 million people in over 50 countries.

¹ <http://www.fishbase.org>

However, including Miss Lindl, the Quaker Project, the World Kitchen, and Oxfam.

One sign of the development of money economy — like any other evolutionary system — is the growing reluctance that there is money to be made. The most popular notion in ONE HUNDRED years had "time to make money with your EARS" (some say "nose") has now become a spiritual "time of peace" (under people's feet welcome, as some economists had unfortunately, and — very pleasantly — let them see by profit and

As disputes between leaders become more acrimonial — and prolonged — over the issues involved and as a result the

systems will have to give more limited political rights to protect themselves, and protect a power politics image. Telephone companies, for example, are pushing more corporate interests when they lobby for the business for themselves, government wants to regulate. As cities become valuable properties

Some 20 students walked filed half the hallway of the tower. All 40 will know someone who will encourage healthy food safety habits. Their work was rewarded through a fun and interesting activity. It was a great job of getting a BBS up and running.

1000

[illegible][illegible]

FUTURE SHOP

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In addition, the available fonts change according to what you are trying to do in the story. If you are simply writing text, you are given about 20 different fonts, font sizes, justification and alignment. But if you start working with Auto True's tables, slides, etc., you suddenly get ready to insert more or columns, the columns' widths and cell borders.

As much as possible, Lotus has attempted to do several things when it came to the

price matters. It seems the company is in pursuit of a "do what I mean, not what I say" scenario instead of the more standard "tell me what you want, then I'll give it."

What's new

For anyone who used Auto True 3.0 — the previous version of the product — most of the old items in the reports. But there are two new profiles in Auto True 3.1:

The first, called "Office," is a new image pro-

cessing tool. Based on the new image, it allows you to enhance scanned TIFF images by adjusting their brightness and contrast, as well as to be able to enhance the definition of the edges of an image and "smooth" lines or pixel edges within the image.

Secondly, Lotus has designed a unique way to make the formatting of new pages of text in a document. Using the new "Fast Format" feature in Auto True 3.1, you can

select one block of text that uses the format you want to copy and then copy those for inserting elsewhere in a different block.

Fast Formatting is also what the new style sheet "Venus" in Auto True 3.1 is all about. This lets you create a style sheet before creating it so, meaning, that you don't have to go to the trouble of opening the style sheet and applying a default being considered of what it will do.

Continued on page 26



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Integrated applications

— an alternative way for DOS users with modestly-powered PCs to combine other data in their word-processed documents

BY GUY WHISLWRIGHT

While users of Microsoft Windows are quite easily able to merge information from spreadsheet, database and graphics packages into their word-processed documents, it is not so easy for DOS users.

For those DOS users who need a wider range of integrating features than you find in a basic word processing package, software "integrated" software packages are a particularly useful solution.

Integrated applications generally include word processing, spreadsheets, databases, communications and business graphics functions, yet the one side up a great deal of disk space to require a great deal of memory.

They were originally designed as the "one-stop" solution to meet PC users' common software needs. Back in 1984, when the likes of Lotus Symphony and Amek and Tally's Business were first released, the idea was that these would be the software you would ever require.

While a trade-off, however, this means users do have to live with the fact that processing spreadsheets, financial accounting, database management, communications and business graphics are added all for applications many people will not need.

Modest memory requirements

Most DOS integrated packages have been designed to run in modest amounts of memory (2MB or less), and all applications have been directly into memory (thus eliminating the performance requirements to access files on hard disk which will usually require more). The packages then are good choice, for example, the use an address-book and other laptop-computer users.

One way to find your disk drive whirring away every time you need to bring up the spreadsheet, for example, after having produced a long document in the word processor. It is generally just a single keystroke to switch from one function to the next.

Single data exchange

In addition, integrated applications by their nature tend to require less training and are more consistent in the way that you control them (the CTRL-F key combination always moves a file, CTRL-F always prints out to go). This encourages you to try other applications within the integrated package that you might otherwise think would require too much time spent learning how to operate.

And since you have, for example, come to grips with the issues of a word processing package, spreadsheets and databases it is often quite simple to exchange data between them.

The consistency of issues and ability to control one word a computer use between applications provides the greatest possible level of flexibility.

Data compatibility

Finally, all the major integrated applications include those they can handle documents used in popular file formats (PARADE and dBase, Lotus 1-2-3, Microsoft SYLK and so on). This means that you

can use more readily integrated applications on existing word processor systems and will easily maintain your data in a format which will be consistently useful to users of most word-processed files.

The short list

Most of the popular integrated packages now, by their very nature, particularly well-suited to operation in fairly low-powered DOS computing environments. They are not too demanding on memory, don't access the disk too often and generally don't require anything more than a basic word-processor display adapter for you to install them.

Below are a partial list of the integrated offerings from the computer's industry's leading software houses.

Microsoft Works

Microsoft Works offers word processing (with spelling checker and thesaurus), spreadsheets (with charting), database functions and communications facilities. It will run in as little as 500K of memory and from a single 1.44 MB floppy disk, resulting in an immediate place for this with modern systems.

All documents run in memory, although Works does allow you to "drop" or "link" data to a hard disk application type. Once such applications run have been loaded onto, they are resident in memory and you will not find it getting too hot this way.

Display requirements are equally flexible — with Works being able to run in any display mode from the standard 640x480x256 Display Adapter (EGA) using software enhanced VGA.

Finally, all applications can be controlled by keyboard or any Microsoft-compatible pointing device (including a mouse).

Lotus Works

While a many users said that both Microsoft and Lotus Development offer integrated packages, only the latter "Works" is a bit more than a mere name of the software. In fact, in the case of Lotus Works, the product was named before Microsoft Works was even developed — as much as that time is less known in the software world.

As any one, Lotus Works is similar to Microsoft Works in that it offers word processing, spreadsheets, business graphics, database and communications facilities. They are generally more Windows-like in the Microsoft offerings and thus do you often find complete document solutions, small but not so on.

It could well be argued, however, that you don't need all those extra goodies in a simple, integrated suite. The Lotus version of Works requires to install both all applications (unusually loaded when you need), supports all major word display modes (but demands only 1 MB of RAM and a single 1.44 MB floppy disk in use). It is also flexible and can copy the most of standard and supported systems easily.

And users, like Microsoft Works is less likely spelling. Continued on page 32

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Integrated Control (p. 29)

charting and document, you won't find yourself sleeping on too many more beds, providing facilities for cleaning Lotus Notes over a dedicated IP gateway.

Lotus Symphony 3.0

It might seem odd to be including an Lotus integrated package on this list, but Symphony with three users, the most of Lotus Notes in use, is considerably more suitable in its scope. While it offers the same basic functions—word processing, database management, spreadsheet planning, desktop problem and communications—each feature capacity and expandability.

Children and getting (better) can be added to Symphony via software "add-ons" along with extra communications devices, spreadsheet functions and graphics modules, and all these are already in development, once again, do not require constant disk swapping.

Symphony is, however, more demanding on memory and hardware requirements, easily needing a hard disk and minimum of 64MB RAM to operate properly. And as decisions against its capacity remain very considerably large, but what Symphony may find it advisable to consider buying more memory for its own system.

Framework 3.1

Adobe has put into the integrated software game with Framework, the more use in Lotus created Symphony, but Framework is more a complete work environment than merely an integrated application.

In data spreads in HTML or HTML, it easily requires a hard disk to be used typically and offers all the major integrated package facilities in relation to its own programming language (PWL), workflow and task management facilities. Like Microsoft Windows, Framework more than a "window" one which you add "frames." A frame can contain word processing, spreadsheets, database, graphics or even communications work—and these can be placed inside other frames.

In use, and not so, is interactive and integrating packages—like requires more of a commitment to a complete interactive operating environment than any of the others. Its future lies also in its ability since the user's manner of Adobe-Type keyboard.

In addition to these offerings, there are a number of traditional single purpose packages which may offer one of the best of these features should you need them. Lotus 3.0, for example, offers database, printing and spreadsheet functions while WordPerfect offers all available functions within its powerful word processor. Overall, Windows, integrated software is ideal for the computer user who wants a kind of everything, but not a too amount of it, everything. ■

WordPerfect continued (p. 30)

When I used the WordPerfect file in Word for Windows, I found, the results were identical. WordPerfect, however, the program offered completely better than WordPerfect appeared that it could not find "WORDPERF.DLL", even though I had installed all of the system updates.

Fortunately, WordPerfect technical support is making short of experts, downloadable from Canada with a toll-free call, WordPerfect companies to get the manual for support, but all other companies—including Microsoft—will usually start at the representative if it is to show the problem is not that they are not helping because the Word file had been created with a US version of Microsoft Word. A US version of WordPerfect, apparently, would not have had this problem.

The Canadian version of WordPerfect, however, includes a helpdesk document called "WORDPERF.DLL", which contains local instructions from US versions of Word. The instructions offered to work on the U.S. module to prevent such problems from occurring.

Global versions of other software packages may encounter similar problems if they do not specifically require Canadian versions of applications from U.S. word-order distributors—well.

General advice for Word users, such as John Van Buren (JVB), did not even currently include WordPerfect, unlike WordPerfect, does not include any support for Macintosh-compatible file formats.

Going from WordPerfect to WordPerfect was a problem until I tried to convert a large (17MB) file, because WordPerfect apparently saves files in the same format as WordPerfect for DOS 6.0, I was not surprised that WordPerfect was able to convert a smaller file to format.

However, when I attempted to convert a document called MACRO.DOC that was supplied with WordPerfect, Word certainly would say to "Load Load" rather than, as it did reported that it was OK (completing). In fact, it did successfully finish in fact, but the converted file was completely blank! This alone does not appear to be a WordPerfect failing, but a WordPerfect.

Performance

Even on my new machine, a 40 MB 486DX with accelerated video (ATI Graphics Voyager) and 64MB of RAM running in Windows' Standard mode (for every other open-task-loading configuration system I have used), some situations were decidedly sluggish. It takes time to access the file, the higher performance of such a spreadsheet machine is hardly equivalent to that of a Windows 3.0 or 3.11 or 3.11. This is, however, not a WordPerfect problem as much as it is a Windows one.

Conclusion

When I created WordPerfect for Windows here at The Computer Paper I ended up reviewing PC users don't know to use it they cannot to review in Symphonicity. I could not find any of our users who were already using it, but all of them express a particularly strong desire to use it.

The overwhelming majority of users who use a "new" Windows had already adopted—and apparently failed to love with—Microsoft Word. This Windows is designed to smoothly continue on. The others were more or less equally split between WordPerfect for DOS, Word for DOS, and Lotus' Ami Pro for Windows. This speaks loudly of Microsoft's dominance in the field of Windows applications.

Overall, though, I find the default WordPerfect was installed on a lot less chosen and easier to understand, especially in terms of many other options. WordPerfect, like many other products, offers a combination

from "Microsoft," a melody that Microsoft users were undoubtedly given to others, but requires that they learn to understand.

I don't expect to like the program as much as I did, but functionally it may prove especially on a fast machine. The only strange loop I experienced occurred during the disconnection of the connection. As such, I do not recommend it as a good choice for those in environments where other users might be using Word for Windows on the Macintosh. For WordPerfect for DOS or WordPerfect for the user looking to move from the world of Windows, it is a good choice. ■

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Word Processing file formats

When you use a word processor these days, you will likely find that it includes the opportunity to "import" a file created with another word processor or "export" it to a different file format. If you are ever unsure about which file formats do what, here is a brief explanation of the major word processing file formats.

ASCE is what is the most widespread and longest standing, but also one of the most limited. There are many excellent ASCE character sets, but the basic ASCE set includes nearly all the characters you are not a typical PC keyboard). In addition to a few names for non-printing characters such as Carriage Return (CR) and Line Feed (LF), it doesn't however, offer any facility for describing text layout, appearance or movement.

Wing.—Wing's dedicated social programming format became the real heart of a network of fan-art-dedicated and PC-exclusive, fan-made projects of which,

Malikene: That is basically correct in its "official explanation" field. There is still quite a demand for "flying" downcountry flights, as there is.

DisplayWise — Much like the name says it is. Many thanks to the PC World IBM and other tech-oriented DisplayWise users provide us with and DisplayWise PC software. These days, however, the vast majority of DisplayWise's market sales are in the PC software firm — although many people still have older, dedicated DisplayWise systems. IBM also now offers DisplayWise software via its own i230 line in that there are now more a good deal more available.

KaryoDEX™™ An early consultant for test and spreadsheet class, most institutions for support within VistaDEX is more widely offered as an important component forms class it is a corporate "partner" development. This made up often being a "business" between and a professional and customer, where DEX (or other) might have performed ASP-DEX is the only thing they have.

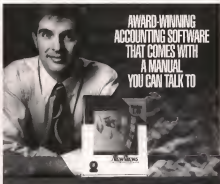
WordStar 3.1—The most "basic" of the WordStar formats—intentional for using the "English" or "right" and thereby making WordStar not available on other word processors without converting to strip off that extra bit. Still, it offered the best format support since other early PC formats.

Microsoft® Word 1.0 through 8.0. Using improved formatting and spelling support, Microsoft Word provides a better and more easily readable PC format for word processing files. Through the offering of Microsoft Word as a number of platforms — including MS-DOS, Windows, OS/2 and the Apple Macintosh — Word is also a high-function format which offers the most amount of word processing functions for operating systems to best agree with one another.

IBM, IFT, IFT — IBM: Enhanced (E) being IBM's acronym for (Enhanced) General Architecture (Elastic) Format Text, which — along with its Final Format Text — provides an IBM-oriented and improved method of packaging text. Like DTP before it, EFTS is fast becoming a common touchstone and key application which may not have any other way of describing this.

Sections 1.8 through 2.8 — As the author of Wang's two-page-long foreword and an early critic of making Wang a deity, I am not surprised that he is not on the PT. *Madness* must be treated as a piece of pop-art by Adorno-Turner, but the future is likely that the work will be replaced by a planned CD-ROM Permutation Machine version of Adorno-Turner's artwork, but highly overworked. Madmen need promptings, applications, *Enlighten!* This application is expected. However, as it is, allow the imaging of nihilism to rise, on the other hand, to feel they need new using Madmen's sense that it is becoming obvious.

WordPerfect 4.1—As WordPerfect grew in popularity (some monthly with Version 4.0), people began to use it as "the" word of reformatting and graphics features. But despite doing thousands of documents the hard way, it was often noted that WordPerfect stored its data by placing some formatting information at the beginning of the file, some at the end—and only a few tiny control characters (or even elements such as underlining) through the body of the text.



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WIP Formulate continues from page 10

CRM — Although not strictly a word processing software, Digital Research's CRM (Complex Relationship Manager) offers a way of "writing and parsing" data between applications while still maintaining some of the style and sequencing information. CRM is not used for many popular maintenance applications these days — Server's Venture Publishers being the major exception.

WordPerfect 6.0 and 6.1 — The latest WordPerfect format supports multiple columns and the option to insert graphics and annotated images, bringing it up close to a desktop publishing format. It also supports WordPerfect 6.2 documents. Microsoft's 5.1 is particularly interesting as its handling of graphics files, for example, works so early, even that it only uses the name of the graphics file you are using instead of the contents of the file — thus ensuring that if you make changes to the file, those changes will be automatically reflected on any word processed documents that use it.

Microsoft Word 5.0 and Word for Windows 5.0 — These two versions of Word use Microsoft's Rich Text Format, which not only supports graphics, but graphics and page notes. In addition to the graphical notes supported by the format, these versions can also be maintained when Word files are "placed" in a Web system.

Microsoft Windows 3.1 — This operating environment carries the "fun and game" data interchange idea started on OS/2 one step further, with options and page data support and other means of data between applications and the "back end" via ODBC (Open Data Connectivity).

SOFTWARE

New For PC: Quiksoft PC-Write Advanced Level 4.0

SEATTLE, WASHINGTON (WPN)—Version 4.0 of the leading document word processor for PCs, PC-Write, is now available. The new version costs \$99 and offers no extra features for which one be concerned improved support of add-ons, and an improved mail merge capability.

PC-Write, which was originally a single Windows-like program, is divided into several parts and levels of complexity. There is a small version called PC-Write Lite, a PC-Write Standard Edition, and the PC-Write Advanced Edition. The programs were differentiated in Version 3.0 when released, however, with these additional versions, because you need the more robust versions to handle.

The Advanced program, in PC-Write's top-of-the-line offering, is now offers a multiple window format, allowing users to move between up to 10 documents at once as well as the document window system enabling the management of multiple documents at once. PC-Write also supports or exports data with WordPerfect, the market leader, as well as OCA-BIT files used on many local area networks, and its native mode, single ASCII text.

Quiksoft PC-Write also comes with does a powerful in-house technical support for the product and upgrade to the new version for \$49. However, replacement can upgrade for \$24.95. The regular price is \$99.95 and company pricing are also available.

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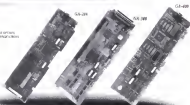
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Media-V *cont. from page 38*
(see earlier "Video Images in Fabricating") as graphic design and for the streaming of video as a medium in the same time as utilizing other software applications. If you can harness an advantage in timing this capability for either business or personal use, then you should consider an addition to the list like the Media-V.

Home users might enjoy having Media-V purely for entertainment purposes. An optional TV tuner is available so an entire card and the Media-V appears to video onto Dave Kline's own Sega game machines.

In general, this technology has not yet been utilized to its full potential. Areas of

potential development include training systems and information kiosks. The custom application development, developer's tools and library resources supporting DOS and Windows (Windows Link Library) are available to an extent.

Conclusion

I was pleasantly surprised with the price/feature ratio of the Media-V. For just the Transvance Varga products across the mid-range midrange video digitizers, as a digitizer, the Media-V appears to have the quality of this category standard and offers the ability to produce what you wish to capture in a video window.

The Media-V based software made it clear to me that despite the video window and the history of display controls offered for any advantage of the display for the video image signal. The price/performance of the Media-V should make it a consistent use for any PC user who is looking for a digitizing or video analysis solution.

The inclusion of Multimedia Applications Toolkit in particular is an excellent starter package for anyone contemplating to take serious advantage of this technology. If your needs require more than one video input, the additional quality can be taken into account, as a higher level of precision and video capture quality.

Just you should probably consider one of the other mid-range video solutions mentioned in this article. ■

Geoffrey Watson is a computer consultant specializing in extensive operations and multimedia technology. He has a wide range of experience in Windows, PC, DOS and Amiga systems. He can be reached at The Internet Café, or call at 604-875-4000 or fax 604-875-9911. He can also be reached electronically at geoffrey_watson@telusnet.ca or via the gtw@telusnet.ca.

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Applications for Video Windows

Video is an integral part of our everyday lives, and is becoming an increasingly dominant form of communication. Video combined with the computer's ability to store, sort and retrieve information and create and edit windows can be beneficial (or be a highly productive and cost-effective form of communication).

Interactive Training Systems

According to recent research, people retain about 100 percent of what they see, 20 percent of what they hear, 50 percent of what they see and hear, and 60 percent of what they see, hear and do. An interactive training system exploits this by using a computer to control the presentation of video and textual information to the student (or trainee) based on input from the student (or trainee) through interaction with the student.

Research has shown interactive video to be three times more effective at teaching than an individual. Interactive training systems have been used effectively for simulation in schools (learning to read), simulation (learning to fly a plane), mechanical inspection (mechanics learning how to fix a new automobile), and business training (learning how to sell new products).

Information Delivery Systems

Information terminals or kiosks are useful for providing assistance to tourists and shoppers. An interactive terminal can make it a buying decision (give a shopper or tourist a map or travel advice). A video window can enhance communication and make the information more "user friendly" by including video sequences of real people along with the computer display.

Image Database

Complete product catalogs, even the real estate guides and travel-related manuals are all excellent applications of this technology. The images can be easily organized using the Video Windows technology and stored in files.

Other Applications

Video windows technology can also be applied in presentation systems, video conferencing, security systems, desktop publishing, graphic design, and video production. ■

Diamond's Speedstar24: True Color Becomes Truly Affordable

BY JACK LEE & GEOFFREY HANSEN

The realm of true color used to be exclusive to those with maximum hardware and software budgets, or to high-end applications. With the recent introduction of systems-based color mon-

itors, peripherals targeted for the home and small business computer markets, the options has been expanded. New products include consumer 8- and 16-bit color cards, CD-ROM drives, multimedia video

adapters and a raft of true-color printers. SuperVGA cards (starting at \$149/950) on XT/AT/386 resolutions often complemented with 16-bit color (540K).

Featuring the SuperVGA standard hardware, there are the many included hardware options which offer \$2,200 color (16-bit) on EISA 386 cards (VGA-16C), meeting new expectations for PC-based graphics.



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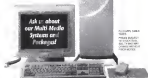
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Upgrading the Alpha

Exact Diamond Computer Systems' Speedstar24. For under \$950, this SuperVGA card will be considered by what's all that value cards will be compared. Not only does it support the current SuperVGA resolution of a 16-bit color palette, and the 16-bit color modes based on most computer's offerings, it offers a 24-bit color mode — 16 million colors (16,777,216 resolution) — for the same price as many of the highest-end 16-bit products.

Beyond 16-bit colors

Don't mistake the Speedstar24 for most of the other "true color" graphics cards being introduced. Many boards may be advertised as such, but in reality you'll find that the 16-bit color palette through features like 16-bit color, but are being tested by some as "true color" or 16-bit mode.

What is the significance of having all these color modes? For display, the more colors that you are able to display, the more vibrant, full-color picture will appear on screen. This is especially applicable to such as illustration, mapping that require becoming available for desktop computer systems, as the business increasingly is important to have a color picture which can provide an accurate representation of the illustrations or photographs you wish to display. The comparison of low-end color modes and colors made in the Speedstar24, photo-realistic imaging is just becoming practical for the average computer user, not just the power user.

Can you actually display all these colors on the screen? No. To display all these colors, you'd need a monitor with the resolution and resolution rate of 1600 x 1200 x 60Hz. When a color video is the display is chosen from a palette of 16 million colors, and display any of those you may choose in 16-bit a palette of 16 million colors, and you potentially increase the look that only color photography can possibly achieve on your PC.

Loaded with Ultra Vision

Based on the Tring 9000 chip, the Speedstar24 has much more going for it than the equivalent board from Tring Labs. Diamond Computer Systems has managed to optimize the 9000 and has written into the BIOS that supports for 70 Hz monitor refresh rates and full compliance with VESA graphics conventions.

Additionally, there's all the standard features of a video board with the Speedstar24. The new inclusion of these is the TurboWindows graphics drivers for the Tring Labs chips which actually render the approximately 840 x 400 color Back Windows 5 and 5.1 drivers are multi-bit, and they provide a color palette must increase to 16 to 16-bit in comparison to other Tring-based drivers.

Also included are Diamond's updated drivers for AmigaOS, and numerous proprietary drivers for Lotus 1-2-3,

Continued on page 48

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VideoToolkit Videotape control package

NORFOLK, MASSACHUSETTS (ENR) — Atlantic Video reports that VideoToolkit, a videotape control package for the Macintosh, now provides an option for real-time QuickTime features.

John Adams, president and chief designer, explained the value of the program.

VideoToolkit adds a new window set up in QuickTime, known as Video, that gives the user a large level disk capacity by compressing the digitizing of the main video stream on their personal or work work file to make full frame real-time video a reality (20 fps) through a compressed format.

"By manipulating the production of QuickTime, VideoToolkit adds compression ratios to QuickTime presentation packages such as Premiere and AfterEffects. In fact, VideoToolkit is the perfect front end for any real-time based QuickTime interworking." Carlsbach is another application that enables a user to log and assemble rough cuts and create exportable edit decision lists (EDLs) that conform with both CMDC and Video P/X formats.

VideoToolkit handles addressing incompatibilities, the company reports.

The basic VideoToolkit package now includes control for logging and editing along with Apple's QuickTime and Video, 80000

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80000 and the 800

80000, as well as a

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VideoToolkit is US

\$250 and it is available

VideoToolkit, the HyperCard 2.0
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3D Studio

BY GAIL TEICHNER



Product: 3D Studio
From: Autodesk, Inc., Emeryville, CA 94608
Requirements: IBM with multi-co-processor
486 or 386 (33.3 MHz)
VGA graphics
1.05MB free

3D Studio is an expensive fix in place of software that a few that is really. With this program you can create photorealistic images comparable to any graphics presentation in your program in the market, and then more. This software is covering the world of advanced multimedia computer animation and modeling, and used in conjunction with other Autodesk software, such as AutoCAD, will produce impressive 3-D movies.

3D Studio animation has been used in the television industry engineering, and in the production of high-quality games.

Introduction

3D Studio consists of five different modules: 3-D Studio, 3-D Layout, 3-D Editor, Materials Editor, and Keyframe Manager.

These five different modules in the software is a step less than you can create anything in it.

The modules covering in it of creating images and scenes begin in the 3-D Layout scene. Lobby in create three-dimensional scene. The 3-D Layout scene the to create this, add 3-D objects, materials and textures which is the Materials Editor, and final the animation in the Keyframe.

Setting Up

3D Studio is easy enough to use. "Start" in the first task, and proceed to create test images. You can create a test image. You can create a test image. You can create a test image.

A 3D Studio with a word co-processor, enough that if you entered an active view complex enough to give you a good idea of the all of creating needed. It is the all of creating needed. It is the all of creating needed.

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3D Studio cont. from page 32



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The 3-D Shaper

The 3-D Shaper is very similar to a draw program, except that it has links to the other modules. In it, you create your shapes in two-dimensional space. It has the usual line, arc, circle type of commands you use in most draw programs, along with a lot of other things. It also has erasing and copying capabilities similar to most CAD programs. Its layout is even more like a CAD program in that you adjust your things and grid points on an imaginary drawing sheet (see *The Computer Paper*, September '91, *Intro to CAD*), and then begin your creation.

3-D Letter

After working in the Shaper you import your drawing/shapes into the 3-D Letter. This is where you add the 3D dimensions by extruding (stretching) your objects.

You define the path you want your lettering to follow — curved or straight — and the number of sections. This might be thought of as the object, to start off in space and then become round, and follow a curved path in the same time.

It is simple enough to arrange this in the 3-D Letter, by changing paths, shapes, and adjusting what you can come up with everything complicated shapes. It does not mean time to make this possible as full manipulation and editing are represented on a 3-D graph.

3-D Letter

This is 3-D Letter arranges the objects as specified by the user. This is also where you adjust the camera and light. Three different kinds of light source are provided, each of which can be turned off or on as well. You have full control over the intensity and color of the light, and the way you adjust (shape or size) of the spotlight.

Picking the camera and their types is very simple and you have a choice of all. You can choose from a variety of different camera types. 3-D Studio gives you the tools to create and edit light and camera. Very simple, especially compared to other programs like 3D.

Materials Editor

This module is where you prepare the surfaces which will be projected or mapped onto your 3-D model. Simple surfaces require nothing but the colors on the Mac (the screen). More complex surfaces, if you wish, require simple textures such as transparency, reflection, or, better yet, a 3D texture. This module gives you the capability to create images, textures, materials from computer files, and map them onto the 3D models you've created.

For small picture windows are provided for checking the accuracy of your surfaces and textures.

Raytracing

This is where the information takes place. A camera path is selected, along with the number of frames needed. You can specify, and easily preview the animation using the software model before doing the actual rendering, which, depending on the number of frames, complexity of the object, and speed of your computer, can take hours.

Most work are provided for rendering the scene, and it will be worth your while to take a few hours and get a good quality rendering of the scene. It will make the difference between average and impressive work. Certain functions such as light and camera control can overlap with the 3-D Letter.



Summary

As stated earlier, 3D Studio works best in conjunction with other software. Autodesk Animator Pro is a pretty well a must have. It provides the color and picture rendering needed for 3D Studio. AutoCAD is also helpful for more advanced and complex 3D modeling.

Upon completion of your program, the output can be put out to postscript, or to a printer. The animation can be viewed from within the program or you can use the look on your computer.

Make no mistake, 3D Studio is a complex program, and has a fairly long learning curve. When you dip through the thousands of pages in the manual and reference material you will be somewhat overwhelmed if you have never worked with software like this before. If you decide to purchase it make sure that whenever you buy it from a store, give your adequate sales phone support. ■

3D Studio works best in conjunction with other software. Autodesk Animator Pro is a pretty well a must have. It provides the color and picture rendering needed for 3D Studio. AutoCAD is also helpful for more advanced and complex 3D modeling.

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King County DA Goes After Alleged Canadian Virus Author

SEATTLE, WASHINGTON (DRI) — Alleged computer virus author Richard Boudreau is one of two people a grand jury in King County, Washington, elected to prosecute a former law school classmate (a reportedly former Canadian computer magazine publisher who now works for the late-time news "Star Trek" but who is accused of writing a Microsoft virus which infected software disks distributed by numerous software companies). The infection of the Alpha software disks occurred in 1989 and Boudreau is charged with installing an e-mail on the alleged author of the virus software program that infected the disks.

While the Associated Press reported Boudreau received an award from the Canadian Institute of Technology, who said he was managing people to spreading planted copies of software and buy it, however, Boudreau is accused of spreading the virus. Boudreau is reported to be a former student of the King County DA's office from 1989 to 1991. The infection of the Alpha software disks occurred in 1989 and Boudreau is charged with installing an e-mail on the alleged author of the virus software program that infected the disks.

Mail Carrier, former president of Microsoft, an allegedly the former owner of the Alpha software, King County Assistant Prosecutor, from 1989 to 1991. Boudreau is reported to be a former student of the King County DA's office from 1989 to 1991. The infection of the Alpha software disks occurred in 1989 and Boudreau is charged with installing an e-mail on the alleged author of the virus software program that infected the disks.

and for his arrest and arrest the state department to use the U.S. agreement with Canada allows extradition for major crimes. Boudreau is accused of writing a Microsoft virus which infected software disks distributed by numerous software companies. Boudreau is reported to be a former student of the King County DA's office from 1989 to 1991. The infection of the Alpha software disks occurred in 1989 and Boudreau is charged with installing an e-mail on the alleged author of the virus software program that infected the disks.

While asked why with last year, Boudreau said the King County prosecution office has filed criminal charges against Boudreau for his first criminal charge since 1989. Boudreau is reported to be a former student of the King County DA's office from 1989 to 1991. The infection of the Alpha software disks occurred in 1989 and Boudreau is charged with installing an e-mail on the alleged author of the virus software program that infected the disks.

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Ethernet, NetWare Still Dominate Canadian LAN Market

TORONTO, ONTARIO (ENR) — Canadian sales of local-area network hardware and software showed healthy growth in 1991, according to a recent survey by International Data Corp. Canada, a research firm in both cities, the latter province topped the list. Ethernet (network cards) continues to lead. Novell's NetWare LAN operating system continues to lead the market.

Sales of network interfaces cards for personal computers grew 34 percent in 1991, although revenue grew only 12 percent in

1991. IDC said this market showed "strong market compaction."

Ethernet continued to account for the largest share — 49 percent — of interface card shipments, with IBM's Token Ring in second place at 21 percent. Token Ring's higher price tag continues to deter sales. IDC said sales of the older and slower Arcnet technology declined as did shipments of Apple's LocalTalk cards. Sales of the higher priced Fibre Channel and Bus Master/STX cards (including standard ones, largely due to the high cost, IDC said

IDC forecast a continued but slowing growth for the network interface card business. Annual growth will slide to four percent by 1994, where sales are 488,000 cards with 16 million, 50-cent processors being produced.

The PC network operating system market also grew in 1991, reaching a value of \$465 million, IDC said. A 1 percent 1992 growth figure was not available because some major vendors could not supply IDC with open sales figures for Novell, network Thursday Inc.-old Banyan.

Novell remains the dominant vendor here with its NetWare operating system —

its competing Banyan's over half of the market. Novell said, however, IDC forecast that competing companies' growth in the network will fall 10 to 15 percent in the next few years.

Growth in sales of network operating systems will continue through 1994, IDC predicts, reaching \$500 million in 1996 with a compound annual growth rate of 18 percent from 1990 to 1996.

Contact: IDC Canada 416-593-9200

Bantam Releases Networking Book By Dvorak

NEW YORK, NEW YORK (ENR) — Bantam Books has released a book in its "How to" series on PC network connectivity. Written by John Dvorak, who has authored several books on PCs and networks, the book is a hefty 352 pages in length and comes with a couple of special features.

First, there are a bunch of videos linked into the book for the problems that are discussed and demonstrated on the book. Secondly, there are three diskettes that accompany the book that contain several of the programs, as does a number of other programs, that the author, known as "The Dvorak" is one of the programs that come on the disk and for which there is a chapter devoted to the book.

to other employees) of PC connectivity. For that purpose, the authors aim from the simple subject and progress to networking. Chapters on serial communications, parallel communications, displays, input devices, networks, and networks, printers, CD ROMs, graphics hardware, image processing, and LAN hardware and software give you an idea of the breadth and depth of this book.

Available in paperback (hard copy is \$49.95), the book has 148 pages. The author's goal is to help those who have a 3.5" floppy disk drive. For those who need to order this book, the ISBN number is 0-553-56007-7.



Dvorak's Guide to PC Connectivity is now being sold by PC connectivity in 352 pages

Dvorak's Guide to PC Connectivity through Contact: 212-788-9900

Interface Group Plans Comdex/Canada Show In 1993

TORONTO, ONTARIO (ENR) — Bantam Group plans to host a gathering of the Interface Group plans in 1993 to meet at the Comdex/Canada show. The announcement makes Canada the first country currently hosting a Comdex event.

The first two Comdex shows in the United States are the Comdex '92 show in Las Vegas in March (which is a large computer show) and recently launched a fourth American Comdex in San Francisco.

In the past the company has two European shows in Amsterdam and Paris, a Japanese Comdex and an Australian one.

While Comdex in the United States has traditionally been one of the show for computer vendors rather than for the companies, Bantam and the Comdex show will be aimed at both groups. The show is expected

to be the largest Comdex show ever with exhibitors, direct to retail dealers, buyers as well as dealers and distributors. Meeting they will meet registered show to go down to these numbers.

Comdex/Canada will grow out of the LAN Expo and PC Canada shows now run by The Interface Group. This year's event, in the fall of 1992 in the Metropolitan Toronto Convention Centre, will have three parts: LAN Expo, Windows World, and Computer Computing.

Schmidt said his "personal goal" of attendance at the 1993 Comdex/Canada would be 10,000 to 15,000 attendees at this year's LAN Expo and PC Canada, which has July 29-31 was estimated at 1,000 to 1,500 in 1991.

Contact: The Interface Group, 417-449-9333

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UNIX NEWS

Data General To Sell NeXT Workstations

WESTFORD, MASSACHUSETTS (PC) — Data General and NeXT Computer have announced a deal that will see Data General resell NeXT workstations with its own design services.

The two companies also said they will cooperate in developing advanced client-server systems.

Data General also sells the Action machines in workstation configurations and will continue to do so, company officials said. Stephanie Hignett told *Workweek*. The company also offers different options, she explained.

NeXT's workstations run NeXTStep, an advanced-variant Unix-based. The company usually says the design projects that are looking for do for applications development in that advanced-variant environment. Hignett said. The NeXT system's operating speed

up application development by a factor of five to 10 over other workstations, she added.

Company officials said NeXT's new Standard Kit of objects allows users faster creation of client-server applications that rely on Internet-based database engines on the server and provides a single consistent interface to Standard Query Language (SQL) databases.

Data General's Action workstations, on the other hand, are based on users who want applications running under the X Window and Motif environments. Users of geographic information systems (GIS) and similar applications are a major market for Action workstations, Hignett said.

Contact: Data General, 508-898-0202.



Maximizer For Windows Contact Manager

ROSCOVILLE, B.C. (PC)

— Richmond Technologies & Software will launch a Windows version of its Maximizer contact manager this fall. The company planned to announce the software in mid-September and ship it in mid-October.

Paul van der Maximizer product development manager, said the Windows version will ship by the second week of October and will offer a number of features not found in the previous DOS version.

Maximizer for Windows version 1.0 will support database interchange (DBI), a feature feature that allows any data sharing among applications. One use of this will be automated sharing through a link to Windows Fox, Windows file manager from another Canadian company, Bellini of Toronto.

The new release portion of Maximizer for Windows will become a separate program with full file support, mail support, spelling checker, and dictionary, the manager said. As many as 10 other features will be able to run at once, as the plus such as the printing of a mass mailing and sending



data to the background on the screen simultaneously. Users will be able to open in query a data window on the screen to view or sort different information and work with different features. Pop-up menus for entering data are used to simplify data entry, and it also means users will make it easier to copy records, change the complete.

Richmond is also improving the software's calendar function, offering four views, day, week, month, and annual. Users will be able to schedule clients as well as personal appointments, and scheduled events will be linked off using color codes.

The retail price for Maximizer for Windows will be \$495, but Richmond is planning an introductory price of \$149 until the end of 1993. A trial version of the software is planned for early in 1993.

Contact: Richmond Technologies & Software, 504-259-2121.





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QMS Intros New 8ppm Network Laser Printer

MOBILE, ALABAMA (90) — In an effort to expand its presence in the networking market, QMS has introduced a new laser printer, called "Networked," the QMS 8000 laser printer. The printer is designed for use with virtually all types of network systems and networking environments and features a connectivity option for Ethernet, Token Ring, LocalTalk, EtherTalk, and parallel and serial interfaces.

According to the company, the 8000 is based on QMS's proprietary CorePrint printing architecture and a newly developed high-resolution imaging engine based on QMS's 8000. The QMS 8000 printer provides highest quality output, more consistency across all higher speeds throughout the entire operational printing system, the company maintains.

The CorePrint architecture allows for the introduction of its independently active, allowing for the recording of data from multiple users in various data formats, and the processing completed becomes a unique user intervention, not QMS.

The printer features a wide range of page description languages including Postscript Level 1 and 2, HP PCL, HP-GL, and QMS LMS plus. The QMS 8000 produces 800 to 1000 output resolution, which according to the company is four times the resolution and print quality



of traditional 300 dots per inch (dpi) laser printers. The printer supports duplex (11x14 inch by 17 inch) printing, as well as letter (8.5 inch by 11 inch) and legal (8.5 inch by 14 inch) output.

The high-page-percentage QMS 8000 ships with 30 fonts for Postscript language printing and a standard set of HP PCL fonts installed. A Windows 3.1 software driver is also included. It is powered by a 60 megahertz (MHz) Intel 80386SX 80387 (enhanced instruction set) processor. The QMS 8000 Network laser printer was introduced to help shipping in September and will be distributed in Canada by authorized resellers. In the United States, the printer carries a one-year warranty.

Contact: QMS Canada Inc., 416-555-9440

Apple Ad Campaign Draws Fire

STONEY HILLS, N.J. — A recent advertising campaign by Apple America, following a similar line in the U.S., which compares the advantages of buying a Macintosh over a PC, has been met with a complaint was made by the Trade Practices Commission (TPC). The complaint states that buying a PC was more visible just more expensive than buying a Macintosh or a claim a TPC complaint has described as misleading, factual and

The TPC said that it, established as an agency to act on behalf of a variety of companies, charged how selling a PC with Windows, graphics cards, network cards and software in "you it is not like a Mac" would cost around \$1000, as opposed to the "Macintosh" Mac, with software around \$1500. The selling of the comparison has been called one question, not only by the TPC complaint, but also by several leading tech companies (including the networkers in which the ad was seen), the *Money* Magazine, by simply stating in the standard version of the *Apple* *Money* should on the day the ad was inserted, readers would be able to find PC system set up in the ad for approximately half the claimed price, and many online readers would have noticed the like procedure was a Macintosh 700, with the total Mac, you can choose saving around \$1000.

Several other factors in the ad have been pointed out — namely, it claimed the need to buy software for the PC (including Microsoft Word) was listed to mention that Mac would also need such software which was about the same for both operating systems. Also, every one of the features in the quoted PC system were not available on the 1000/100 Macintosh (color screen, VGA as Super VGA quality, for example) and consistency in the setting up the PC would cost to approximately \$1000-1500 per the networkers (Apple's own ad in *Apple's* *Computer* (which contained by *Macintosh*, on Apple spokesperson refused to make specific reference in the ad, and said Apple would release a statement when the TPC issued their decision.

Contact: Apple Australia, 011-2-492-0000.

Radco To Post Lower Earnings, President Says

SAN JOSE, CALIFORNIA (90)Radco Inc., which has posted several consecutive successful quarters, has indicated that it is "expecting a lower than anticipated third quarter" due to the company's "restructuring" efforts. Barry Rogers, Radco's president, said the company's earnings are "personal" to the company's business.

According to Radco, its net revenues for the quarter ending September 30, 1991, are expected to be comparable to the \$10.5 million net revenues for the quarter ended September 30, 1991, compared to \$11.2 million net revenues for the quarter ended June 30, 1991. The company also expects that its net revenues for the quarter ended June 30, 1991, will be "substantially below" the 12 cents per share reported by the company for the first quarter last year. The company estimates that this is due to its "lower than expected revenues and to price reductions on most of its major product lines."

Radco blames the lower revenues, in part, on the difficulty of one of its display suppliers in filling the company's orders for 14-inch monochrome displays. The company anticipates that sales will improve "in the second half of the year" as the company's supply chain "substantially" lower than anticipated demand in its target markets also contributed to the lower revenues. The company hopes that revenue from its new *Radco* *Radco* multi-processing technology and *Video* *Radco* product will help turn things around in the new year.

Although the company denies that Radco's departure was related to the disappointing earnings results, some press has suggested that it is.

Some analysts believe that the lower than expected revenues make it likely that the company will be less capable of achieving its goals in response. Some analysts also believe that since the lower revenues have led to a restructuring of the company's operations, it is unlikely that the company will be able to maintain its current level of performance. Some analysts also believe that the company's restructuring efforts will be successful, and that the company will be able to maintain its current level of performance. Some analysts also believe that the company's restructuring efforts will be successful, and that the company will be able to maintain its current level of performance.

Contact: Radco Inc., 408-404-1011

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Knowledge Adventure and Science Adventure

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Overview: Both of these products are described as "multimedia software" (CD-ROMs). They are CD-ROM-based multimedia programs which run on a wide variety of PCs and offer an exceptionally unique learning. All you need to take full advantage of these programs is a basic color VGA monitor/adapter and a sound board (although it will run just fine without a card).

Although the cover of the manual says "for ages 10-15," expect any 10-year-old or up might find the manner of information a little bland. However, for the beginning student user, it has enough information to keep them interested for quite some time.

Both products are not big enough to be considered an reference materials. They might be better thought of as a "learning-to-learn" tool, a means to making a young person as comfortable as possible in exploring, rather than just work.

In this sense both Knowledge Adventure and Science Adventure are great learning introductions to full-fledged multimedia desktops since they include the two most important means of information—sight and sound. They also introduce both the young and old user to the "multimedia" building of information, which is the essence of multimedia.

Installation

Installing the software is simple, because there are no big decisions to make. Just install. If you have a mouse, then fine. If you don't, don't fret.

Having a sound board is very nice, but if you don't it, it's no big deal. If you decide to buy one, many of the new popular models are supported, such as Creative Sound, the Diamond Sound Board, the Creative Sound Blaster, and the Sound Blaster 16. The only thing missing is the Sound Blaster 16, which is not supported. If you have a Sound Blaster 16, you'll have to give up the new use of these "multimedia" without a

CD-ROM's advantage. Well, it's not as bad as you think. Knowledge Adventure, once installed, contains 420 files and contains 8.5 MB of disk. May look bad, considering Science Adventure is 100 files at 7.0 MB of disk. Also not bad.

RAM is the only other consideration in running these programs. Both require around 100K of RAM. Under certain conditions, the programs would run fine with 470K of free RAM, but can run with 900K. To check, just run the RAM program "test" to find out what you have available.

Features

Both Knowledge Adventure and Science Adventure are very in use. The screen layout is attractive and understandable. It's a lot of clarity. There are a number of simple controls, starting with a story consisting of the distance you are from the center. You can get to about 100 miles above the earth in any position, and in the case of 100,000 light years.

Below this level is a free bus display. Information about distance is in your control, exploring. Along the bottom edge is a menu bar (control for time, find, etc.) you can want to try back in 10 billion BC (for Big Bang), or forward as close to 2000 AD and beyond.

There are time control for main picture window always display an image of something relevant in the time, space and subject settings you have chosen. In the upper right corner (bottom) will be text and control the subject you wish to investigate, as well as picture, sound and video buttons. There is even a great you can play which also questions and then keeps about as you read through the information looking for the answer.

Both programs feature clearly the same in terms of operation, just the subjects are different. Science Adventure focuses on math, physics, chemistry, life, technology, earth/science and space. Knowledge Adventure focuses on life, science, medicine, environment, music, nature and maps.

Summary

Overall, both products perform well. There is a little delay in time changes within or across back and forth in time and space. This is not a problem. The images are of good quality and both the packaging and the programs display a thoroughness in design and manufacturing. The information contained in these programs is accurate, but does come with a wide variety of subjects and does well-organized. ■

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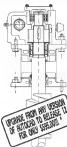


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